



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,976	11/26/2003	Koji Fujita	NY-KIT-361-US	9039
24972 7590 02/21/2007 FULBRIGHT & JAWORSKI, LLP 666 FIFTH AVE NEW YORK, NY 10103-3198			EXAMINER BEX, PATRICIA K	
			ART UNIT	PAPER NUMBER
			1743	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/21/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/722,976

Applicant(s)

FUJITA, KOJI

Examiner

Kathryn Bex

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2004.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-9 is/are rejected.
- 7) ☒ Claim(s) 1, 5-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/02/2004, 6/09/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Applicant is advised of possible benefits under 35 U.S.C. 119(a)-(d), wherein an application for patent filed in the United States may be entitled to the benefit of the filing date of a prior application filed in a foreign country.

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Objections***

2. Claims 1, 5-9 are objected to because of the following informalities: for clarity claim 1 should include which axis (central longitudinal, etc.) of the cell Applicant is referring to. In addition, the Examiner suggests changing "downwards", in claims 1 and 5, to --toward said transparent bottom--, since no reference to up and down is established in the claim. Claims 5-9 are objected to due to their dependence on claim 1. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1, 5-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1743

5. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

For example, claims 1 and 5 recite the limitation "the reflecting face" (penultimate line claim 1 and last line claim 5). There is insufficient antecedent basis for this limitation in the claims. The Examiner has interpreted the limitation as "said light reflected face" in line 3 of claim 1.

Similarly, "the sample holding cell" in claim 6 should be the -- said sample holding cell-- and "the plate-like member" should be --said plate-like member--.

In addition, is it not clear what the difference is between the "inner side of the cell" in claim 1 and the "inner peripheral face" of the cell disclosed in claims 5 and 6. Clarification is requested.

Claim 6 refers to "an inner peripheral face of the sample holding cell", it is not clear as whether this the same or an additional "inner peripheral face" referred to in claim 5, from which claim 6 depends.

Applicant is required to thoroughly inspect and amend the claims so that they conform with current U.S. patent practice.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 5-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Feygin, (US Patent no. 6,563,117).

Feygin teaches a biochemical vessel having a plurality of sample holding cells (106C, Fig. 7; 106E, 1093-1099, Fig. 10 and Fig. 12) juxtaposed one next to another, each cell having a light transparent bottom (1088A, 1092, Fig. 10), wherein each sample holding cell includes, in its inner side, a light reflecting face 212 (e.g., layer of metal; column 2, lines 20-22) which extends radially away from the center longitudinal axis of the cell as the reflecting face extends downwards (toward the substrate 102).

With respect to claim 6, the sample holding cells are formed by bonding one side of a plate-like member to a light transparent substrate (column 12, line 66- column 13, line 19), the plate-like member having a through hole (e.g., formed by sidewalls of the substrate 1088A; Fig. 10), the side walls include a light reflecting face 212 which extends radially away from the longitudinal axis of

Art Unit: 1743

the cell as the reflecting face extends toward the other substrate (e.g., 102; Fig. 10).

Please note that a recitation with respect to the manner in which a claimed apparatus is intended to be employed, (i.e., for use in infrared spectrum imaging system) fails to differentiate the claimed apparatus from a prior art apparatus because the prior art apparatus teaches all the structural limitations of the claim and could be used in ultraviolet and visible spectrum imaging systems. Moreover, it has been held that the material or article worked upon also does not limit an apparatus claim but is rather an intended use of the apparatus. See MPEP 2114, 2115, 111.02 and *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

8. Claims 1, 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Rahbar-Dehghan, (US Patent no. 6,587,197).

Rahbar-Dehghan teaches a biochemical vessel having a plurality of sample holding cells (18) juxtaposed one next to another, each cell having a light transparent bottom (18b), wherein each sample holding cell includes, in its inner side, a light reflecting face 18a' (column 7, lines 33-35). Figure 6 illustrates one embodiment wherein the light reflecting face extends radially away from the center longitudinal axis of the cell as the reflecting face extends downwards.

Art Unit: 1743

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feygin, (US Patent no. 6,563,117) in view of Pham et al., (US Patent No. 6,171,780).

Feygin et al., disclose the biochemical vessel substantially as claimed and described above. Moreover, Feygin et al., do disclose the use of reflective coating on at least a portion of the inner peripheral face of the cell. However, Feygin et al., fail to specifically disclose the reflective coating formed as a mirror finish.

Pham et al., teach a biochemical vessel device for spectroscopic measurements. The vessel includes a substrate having a plurality of wells formed in a frame 10 connected to a transparent base plate 11. Pham et al.,

Art Unit: 1743

discloses the use of an optically opaque material (reflective, mirror coating or mirror polish) to prevent cross-talk between wells, so that the sensitivity and accuracy is increased (column 13, lines 20-32). The use a mirror coating is advantageous since they are generally cheaper to use than reflective metals.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted a mirror finished surface, as taught by Pham et al., for the reflective metal disclosed in Feygin et al., in order to lower manufacturing cost of the biochemical vessel.

12. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rahbar-Dehghan, (US Patent no. 6,587,197) in view of Pham et al., (US Patent No. 6,171,780).

Rahbar-Dehghan discloses the biochemical vessel substantially as claimed and described above. Moreover, Rahbar-Dehghan does disclose the use of metal reflective coating on at least a portion of the inner peripheral face of the cell. However, Rahbar-Dehghan fails to specifically disclose the reflective coating formed as a mirror finish.

Pham et al., teach a biochemical vessel device for spectroscopic measurements. The vessel includes a substrate having a plurality of wells formed in a frame 10 connected to a transparent base plate 11. Pham et al., discloses the use of an optically opaque material (reflective, mirror coating or mirror polish) to prevent cross-talk between wells, so that the sensitivity and



Art Unit: 1743

accuracy is increased (column 13, lines 20-32). The use a mirror coating is advantageous since they are generally cheaper to use than reflective metals.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted a mirror finished surface, as taught by Pham et al., for the reflective metal disclosed in Rahbar-Dehghan in order to lower manufacturing cost of the biochemical vessel.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are as follows: Oikari et al., (US Patent no. 5,329,123), Szlosek (US Patent nos. 5,759,494); Lehtinec et al., (US Patent no. 5,061,853); Sonne et al., (US Patent no. 5,298,753) teach various microwell plates for preventing optical crosstalk between wells.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to P. Kathryn Bex whose telephone number is 571-272-2374. The examiner can normally be reached on Monday thru Thursday, 9 AM to 6 PM, EST.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information

Art Unit: 1743

for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PKB

  
Jill Warden  
Supervisory Patent Examiner  
Technology Center 1700